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ABSTRACT

This paper reviews the literature pertaining to the measurement of attitudes toward reading, and recommends a workable approach for the elementary grades based on available instrumentation. The preliminary section summarizes the findings of studies relating to the theoretical framework of the psychology of reading. Reading research findings relating to two particular personality factors, self-concept and motivation, are used as focal points. The principal section reviews available types of instrumentation for measuring attitudes toward reading. The major types of instrumentation reviewed are: projective techniques, ethnic-specific instruments, observer-report measures, verbal self-report instruments and pictorial measures. The findings of over 35 separate studies concerning approximately 15 different instruments are included. In the concluding section, the authors recommend a multi-measure approach based on Rowell's (1972) observer-report instrument, and Estes' (1971) verbal report instrument. The development of a pictorial instrument based on elements of existing measures is also suggested. (Author/RC)

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A REVIEW OF INSTRUMENTATION TO ASSESS READING ATTITUDES IN THE ELEMENTARY GRADES

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The purpose of this paper is to review the literature pertaining to the measurement of attitudes toward reading. In light of the recent interest among elementary school educators in the affective domain as related to academic achievement in general and to reading achievement in particular, a comprehensive review of the types of instrumentation currently available constitutes a high priority.

Three aspects of attitude toward reading are addressed. In the first section of this paper the theoretical context for the measurement of reading attitudes is considered. Next, a review of the available types of instrumentation is presented. In the final section, a selection of the alternative approaches to measuring reading attitudes in the elementary grades is recommended in the form of a multi-measure strategy.

Theoretical Context

Psychology of Reading

The measurement of attitudes toward reading is classified within the domain referred to by a series of research reviews (Chester, 1974; Otto et al., 1973; Harris et al., 1970) as the "psychology of reading." Several studies (Bazemore & Gwaltney, 1973; Bell et al., 1972; Blackman & Burger, 1972; Elliot, 1972; Glick, 1972; Hunter & Johnson, 1971; Levine & Fuller, 1972; Neal, 1967; Spencer, 1972) have focused upon the identification of personality factors related to reading ability via a comparison of readers and retarded or nonreaders. The instrumentation relied upon in such studies generally have a clinical psychology orientation. Zimmerman and Allebrand (1965), for example, compared a group of poor readers (N=71) with a group of good readers (N=82) by

means of the California Test of Personality. They found statistically significant differences between the two groups with respect to the CTP's "Personal Adjustment" scales, but generally non-significant differences with respect to the "Social Adjustment" scales.

Self-Concept

One particular personality factor which has merited considerable attention in this context is pupil self-concept. Leeds (1971) presents a comprehensive review of the research relating to self-concept in the educational milieu. Several studies (e.g., Butcher, 1967; Williams, 1971; Owens & Gustafson, 1971) have focused upon determining the relationship between reading and self-concept, as measured by the Coopersmith Self-Esteem Inventory. In his review of this area, Williams (1971) identifies a split among dissertation studies (Butcher, 1967; McLendon, 1967; Palardy, 1969; Ruhley, 1970; Wass, 1965) concerning the relationship between these two variables among young children. Subsequent studies by Glick (1972), who used Brookover's Self-Concept of Ability modified for the elementary level, and Lewis (1972) add further doubt to the existence of such a relationship in the early grades. However, as Williams further indicated, the weight of the research (e.g., Campbell, 1967) supports the existence of such a relationship in the intermediate grades, with a possible high point at grade four. With or without the justification of such research, several sources (Beretta, 1962, 1970; Fennimore, 1968; Gillham, 1967; Jackson, 1972; Kokovich & Matthews, 1971; Quirk, 1972; Rosenberg, 1973) have emphasized the need for self-concept enhancement in reading programs.

Motivation

The area of motivation, as Hake's (1969) study illustrates, is an

appropriate bridge between the broad theoretical context and the specific instrumentation issue. Before proceeding into the types of instrumentation developed by Hake and other researchers, the findings of one specific study in the area of reading motivation merits mentioning. Estes and Vaughan (1973) offered a selection of reading passages on different topics at the same difficulty level to a group of 46 subjects in the fourth grade. The subjects were asked to choose and read the two selections of the six which they perceived to be the most and least interesting, respectively. Comparison of their reading comprehension scores for the high and low interest materials revealed a significant difference at the .01 level.

Types of Instrumentation

Projective Technique

Several studies (Gann, 1948; Mutiner et al., 1966; Poloni-De-Levie, 1966; Spache, 1948) have applied the pictorial projective technique of the personality assessment field, as exemplified in the Thematic Apperception Test, to the area of reading attitudes. However, as Hake's (1969) Reading Apperception Test demonstrates, the complexity of the scoring system makes this technique generally impracticable.

The picture-story technique developed by Lipskey (1971) may be an exception. Based on the nine pictures of situations relating to reading in the context of the four major environmental influences--home, school, peers, and cultural values--Lipskey elicited 194 statements from 10 high-achieving and 10 low-achieving readers. By means of the independent judgements of a panel of psychologists and subsequent item analysis,

Lipskey was able to reduce the number statements to 109, all of which were identifiable as positive or negative. In addition to providing evidence of test-retest reliability and construct validity, this procedure may allow for a checklist type of response mode in lieu of the unwieldy open-ended response mode of the typical projective instrument.

Self-Social Constructs Technique

Riendeau's (1973) dissertation exemplifies the use of the unobtrusive, pictorial self-social symbols task approach developed by Ziller et al. (1969). Although applicable to young children in the form entitled the Children's Self Social Constructs Test (Henderson, Long & Ziller, 1967), this technique is subject to question (Carlson, 1970; Zirkel & Gable, 1975). In contrast to the field of self-concept research, where the controversy relating to its validity is currently concentrated, there are other pictorial measures in the area of reading attitude assessment presently available which seem to have more promising psychometric properties.

Semantic Differential

Another technique widely used in self-concept and other attitudinal research is Osgood's semantic differential. As exemplified by Wiggins' (1971) dissertation, this technique can be applied to the assessment of reading attitudes. However, given its high verbal factor and global propensities, the semantic differential does not seem as strong a basis as other options.

Ethnic-Specific Instruments

Before proceeding to what appear to be the preferable alternatives, several instruments applicable to minority populations or materials should be included in case such an option is relevant. In order to assess the effects of using minority materials, some studies (e.g., Litcher & Johnson, 1969) have resorted to the use of instruments from the ethnic identity field. However, Cooke's (1971) Attitude Toward Black Literature Scale represents the development of a specialized instrument for this purpose. Johnson and Jacobson's (1968) "Anthropomorphic," "Underdog," and "Culturally Alien" Attitude Inventories for assessing the reactions of pupils in grades 4-6 to reading materials with such thematic content is of restricted utility. Finally, Rodriguez' (1974) dissertation offers a reading attitude instrument for Puerto Rican pupils: Lo que pienso de la Lectura ("What I Think About Reading").

Observer-Report Instruments

Early research (e.g., Newman, 1960, 1963; Russell, 1967) utilized informal observation as a basis of assessing attitudes toward reading. Although promising in terms of practicability and perspective, the informal method lacks structure and stability, and tends to be excessively subjective. Rowell's (1972) recent Attitude Scale for Reading is a welcome addition to the field. In order to eliminate the possible intervening variable of the subject's reading ability, Rowell's scale is intended to be used by the teacher or other professional who has had an opportunity to view the pupil's behavior relating to reading. The scale is comprehensive in scope, covering reading for pleasure (items 7-13),

in content areas (items 14-16), and in reading classes (items 1-6). The last group of items are particularly, but not exclusively, applicable to basic reading programs. Based on a rather limited sample but sound strategy of student teacher-supervising teacher pairs, Rowell reported a mean inter-rater reliability coefficient or .88 and a mean concurrent criterion validity coefficient of .70. The pupils were in the fourth and fifth grades.

Verbal Self-Report

In contrast to self-concept research, there is a paucity of verbal self-report instruments in the reading attitude assessment area. Simple, separate questions, as utilized in Samuels et al. (1974) study of attitudes toward the use of pictures in reading materials, are not directly useable in the general field of reading attitude assessment. Nor are instruments based on open-ended statements which have been utilized for reading interest surveys (e.g., Beta Upsilon, 1934) conveniently comprehensive and quantifiable for program evaluation or practical diagnostic purposes.

However, Estes (1971) Reading Attitude Scale was specifically developed for such purposes. Based on an item pool from 27 high school and elementary teachers, Estes' scale was reduced to 28 and then 20 items via pilot testing and item analysis, respectively. Estes' reported a split-half reliability coefficient of .94. However, as partially indicated in his article and confirmed by experience with this instrument in Connecticut Title I programs, a possible difficulty with the use of this scale in the elementary grades is its appraently low ceiling (i.e., clustering of scores at high end of the Likert-type scale). The difficulty and sensitivity with regard to reading ability levels in the

lower grades also present another possible problem with this otherwise promising instrument. Kennedy and Halinsky (1975) have also developed a similar Likert-type self-report instrument which is designed for measuring the reading attitudes of secondary school students. Their instrument is longer than Este's instrument, being 40 items as opposed to the latter's 20 items. The authors report a split-half reliability coefficient of .93 and provide some evidence of the criterion validity of their instrument. Due to the length and intended level of the instrument, its use in the early grades is limited.

Finally, Feeley (1974) has developed an inventory instrument which consists of fictitious annotated titles to which pupils are asked to respond on a like-dislike scale and a media scale. This instrument merits mention for its creative strategy but does not appear to be directly applicable to the broad need for a reading attitude instrument in the elementary grades.

Pictorial Activity-Preference Instruments

Several versions of an alternative self-report technique, based on forced choices among pairs of pictured activities, have been developed in research studies conducted at the University of Wisconsin's Research and Development Center for Cognitive Learning. The original version was developed by MacDonald (1966) to assess attitudes toward reading as a school subject. Entitled the Reading Preference Picture Test, MacDonald's instrument involves choices between reading vs. other school activities (e.g., drawing, writing). The choices are geared to pupils in the early grades but appear modifiable to activities in higher elementary grades. Schotanus (1967) subsequently adapted the activity preference instrument

to assess attitudes toward reading as a leisure activity. Askov (1969) expanded and strengthened the activity preference scale for use with second and third grade pupils. She reported a test-retest reliability coefficient over a one-week period of .91. Moreover, evidence of instrument's concurrent criterion validity was presented. The only limitations of Askov's version appear to be its somewhat seasonal basis and its emphasis on reading outside of the classroom (i.e., as a leisure activity).

Other Early Childhood Measures

As noted previously, the measurement of attitudes toward reading is extremely difficult in the early primary grades. In this regard, Trost's (1971) instrumentation does not seem to be directly applicable, but Crandall's (1973) Reading Attitude Inventory may hold some promise for use with primary-grade children.

Groff's (1962) study incorporated a modification of Remmors' Scale for Measuring Attitude Toward any School Subject. If the emphasis for the use in the early grades is attitude toward reading as a school subject, Groff's instrument should be considered.

A count of books read would appear to be a useful measure as one data point among other measures (Sperber, 1968), but not as the only source of evaluation (Healy, 1965). Problems inherent in this procedure primarily center around the relationship between reading level and books length. As reading level increases, the number of books read may decrease because of the increased page count per book and word count per page.

Recommended Alternatives

Based upon related research in the affective area (Greene, Moses &

Zirkel, 1973), it would appear advisable to adopt a multi-measure approach, emphasizing complementary, not duplicative, sources of data. A study by Ransburt (1973) demonstrated that pupils, their parents, and their teachers view attitudes toward reading differently. Thus, it would appear worthwhile to include as one element of a multi-measure approach Rowe's (1972) observer-report instrument, which could use the teacher, reading specialist, parents, or peers as the data source. A supplementary data point could be a book count. According to Schotanus (1967), both Rothrock (1961) and Sperber (1968) utilized an estimate of number of books read as an element of a multi-measure approach. It should be added that parents, peers and teachers can also serve as supplementary sources of this information.

The second element of the multi-measure mixture for the present project involves a choice among self-report measures. If reading ability is adjudged to be adequate, Estes' (1971) verbal self-report instrument may be appropriate. If reading ability may be an intervening factor, Estes' instrument may be administered audio-visually. However, pictorial stimuli as represented by Lipskey's (1971) projective technique or by a version of the activity preference picture technique may be best in terms of both ease and effectiveness.

Finally, if some developmental effort is deemed to be appropriate, a self-report measure utilizing both pictorial stimuli and pictorial response options, as exemplified by Zirkel and Greene's (1974) Cultural Attitude Scales would be a feasible and favorable improvement. Part II of MacDonald's (1966) pictorial instrument points the way. This developmental effort would require artistic assistance and trial testing time.

As has been noted in this document, several promising instruments exist for assessing reading attitudes. Although no one instrument or strategy provides total information, it must be recognized that "in the land of the blind, the one eyed man is king."

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